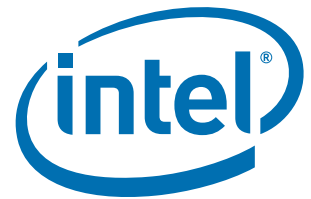


## Product Brief

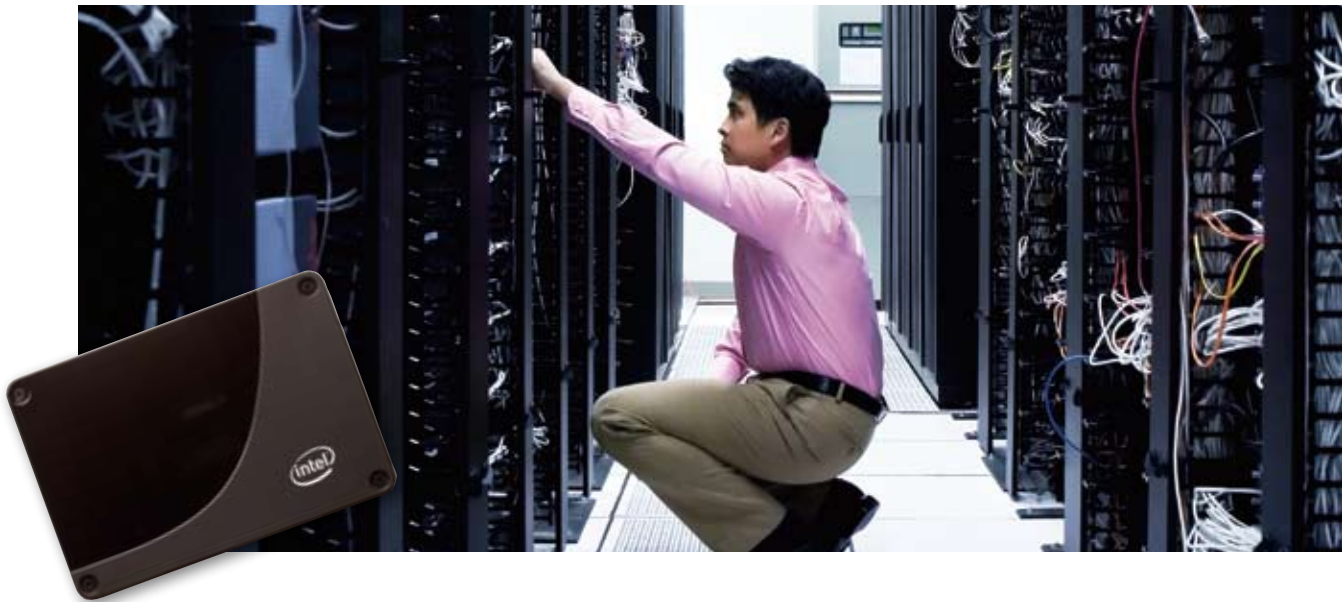
Intel® High-Performance SATA Solid-State Drive Product Line

NAND Storage Solutions from Intel



# Intel® X25-E Extreme SATA Solid-State Drives

Extreme Performance and Reliability for Servers, Storage, and Workstations



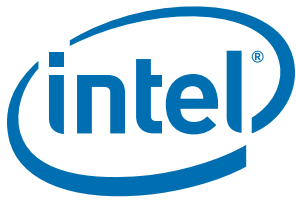
The Intel® Extreme SATA Solid-State Drives (SSDs) offers outstanding performance and reliability for servers, storage, and high-end workstations.

### **Reduce Your Total Cost of Ownership (TCO)**

Enterprise applications place a premium on performance, reliability, power consumption, and space. Unlike traditional hard disk drives, Intel® Solid-State Drives have no moving parts, resulting in a quiet, cool storage solution that also offers significantly higher performance than traditional server drives. Imagine replacing up to 50 high-RPM hard disk drives with one Intel® X25-E Extreme SATA Solid-State Drive in your servers—handling the same server workload in less space, with no cooling requirements and lower power consumption. That space and power savings, for the same server workload, will translate into a tangible reduction in your TCO.

### **Better by Design**

Drawing from decades of memory engineering experience, the Intel X25-E Extreme SATA Solid-State Drive is designed to deliver outstanding performance and reliability, featuring the latest generation native SATA interface with an advanced architecture employing 10 parallel NAND Flash channels equipped with single-level cell NAND Flash memory for even greater overall performance and reliability. With powerful Native Command Queuing to enable up to 32 concurrent operations, these Intel SSDs deliver higher input/output per second and throughput performance than other SSDs on the market today—and drastically outperform traditional hard disk drives. These Intel drives also feature low write amplification and a unique wear-leveling design for higher reliability, meaning Intel drives not only perform better—they last longer.



[www.intel.com](http://www.intel.com)

## Validated and Tested by Intel, on Intel

All Intel® X25-E Extreme SATA Solid-State Drives are tested and validated on the latest Intel-based server and workstation platforms, for your peace of mind.

## Intel® X25-E Extreme SATA Solid-State Drive

Technical Specifications	
<b>Model Name</b>	Intel® X25-E Extreme SATA Solid-State Drive
<b>Capacity</b>	32 GB and 64 GB
<b>NAND Flash Components</b>	Intel® Single-Level Cell (SLC) NAND Flash Memory 10 Parallel Channel Architecture with 50nm SLC ONFI 1.0 NAND
<b>Bandwidth</b>	Sustained sequential read: up to 250 MB/s Sustained sequential write: up to 170 MB/s
<b>Read Latency</b>	75 microseconds
<b>I/O Per Second (IOPS)</b>	Random 4 KB reads: >35,000 IOPS Random 4 KB writes: >3,300 IOPS
<b>Interface</b>	SATA 1.5 Gb/s and 3.0 Gb/s
<b>Form Factor</b>	2.5" industry standard hard drive form factor
<b>Compatibility</b>	SATA revision 2.6 compliant. Compatible with SATA 3 Gb/s with Native Command Queuing and SATA 1.5 Gb/s interface rates
<b>Life Expectancy</b>	2 million hours Mean Time Before Failure (MTBF)
<b>Power Consumption</b>	Active: 2.4 W typical (server workload <sup>1</sup> ) Idle (DIPM): 0.06 W typical
<b>Operating Shock</b>	1,000 G/0.5 ms
<b>Voltage</b>	5V SATA supply rail
<b>Operating Temperature</b>	0°C to +70°C
<b>RoHS Compliance</b>	Meets the requirements of EU RoHS Compliance Directives
<b>Product Health Monitoring</b>	Self-Monitoring, Analysis and Reporting Technology (SMART) commands, plus additional SSD monitoring

For more information, visit [www.intel.com/go/ssd](http://www.intel.com/go/ssd).

1. Active power is measured on an IOMeter workload of full bandwidth 64 K sequential writes with queue depth 1.

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